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D2154

Job Sheet 181205



Part No: D2154

Job Qty: 12 ea

Part Name: Bracket, Stud



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/24/18

Job Tracking No:

Due Date: 8/31/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV C IPP: C 03.08.08 Reformat; Remove Tumble KJ/RF IPP Rev:D NowOn Waterjet 07-04-09 JLM  
Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty    | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off         |
|-------|--------------------|--------|------------|----------|-----------|---------|-----------------------|-----------|------------------|
|       |                    |        |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |                  |
| 90    | Start up Operation | 12 Ea  |            | 8/31/18  | 0.00      | 0.00    | Start Up Waterjet     |           | SC 18/08/26      |
| 100   | Waterjet           | 12 pcs |            | 8/31/18  | 0.00      | 0.56    | Waterjet1             |           | SC 18/08/26      |
| 120   | QC                 | 12 pcs |            | 8/31/18  | 0.00      | 0.00    | QC8                   |           | 38               |
| 140   | Brake NC           | 12 pcs |            | 8/31/18  | 0.01      | 0.30    | Brake NC 2            |           | 9-89 SR          |
| 150   | QC                 | 12 pcs |            | 8/31/18  | 0.00      | 0.00    | QC5                   |           | AUG 20 2018 38   |
| 160   | Powdercoat         | 12 pcs |            | 8/31/18  | 0.00      | 0.14    | Powdercoat2           | TIME 0.17 | BR 18-8-2018 68  |
| 170   | QC                 | 12 pcs |            | 8/31/18  | 0.00      | 0.00    | QC3                   |           | AUG 29 2018 68   |
| 180   | Packaging          | 12 pcs |            | 8/31/18  | 0.00      | 0.00    | Packaging3-1          | 7000      | AUG 31 2018 9-89 |
| 190   | QC21-SA            | 12 Ea  |            | 8/31/18  | 0.00      | 0.00    | QC21                  |           | 9-89             |

Part Op 100 - 1-Cut as per Dwg D2154  
Descriptions: 140 - Form as per Dwg D2154

160 - START TIME: 9:10 FINISH TIME: 9:40 O.V.T. 400°

M 83893

21 AUG 31 2018 9-89

### Job BOM

| Part / Item | Component Name     | Quantity            | Operation             | Container |
|-------------|--------------------|---------------------|-----------------------|-----------|
| M304S16GA   | 304/316 Sheet .063 | .3996 sf (.0333 ea) | 90-Start up Operation |           |

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | M304S16GA      | 0        | 124       | 0         |

### Part Specifications

| Spec No | Description   | Target/Tolerance    | Limits         | Type  | Special Comments |
|---------|---------------|---------------------|----------------|-------|------------------|
| 1       | Bracket, Stud | 2.250Inches ± 0.010 | 2.260<br>2.240 | 2,249 |                  |
| 2       | Bracket, Stud | 1.438Inches ± 0.010 | 1.448<br>1.428 | 1,440 |                  |
| 3       | Bracket, Stud | 0.406Inches ± 0.010 | 0.416<br>0.396 | 0,405 |                  |
| 4       | Bracket, Stud | 1.778Inches ± 0.010 | 1.788<br>1.768 | 1,780 |                  |
| 5       | Bracket, Stud | 2.128Inches ± 0.010 | 2.138          | 2,130 |                  |



DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

| Work Order: _____ | DISPOSITION                                   | AGAINST DEPARTMENT/PROCESS             |                                     |                                              |                                      |  |
|-------------------|-----------------------------------------------|----------------------------------------|-------------------------------------|----------------------------------------------|--------------------------------------|--|
| Part No. _____    | Rework <input type="checkbox"/>               | Skid-tube <input type="checkbox"/>     | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |  |
| NCR No. _____     | Scrap <input type="checkbox"/>                | Machining <input type="checkbox"/>     | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |  |
|                   | Use-as-is <input type="checkbox"/>            | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |  |
|                   | Suspected Unapproved <input type="checkbox"/> | Large Fab <input type="checkbox"/>     | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>            |                                      |  |

|              |               |                       |
|--------------|---------------|-----------------------|
| Date : _____ | Step #: _____ | QTY Effective : _____ |
|--------------|---------------|-----------------------|

### Description Work Order Deviation

Container No: S096799  
Part: D2154  
Job No: 181205  
Serial No/ Batch: S096799  
Revision: \_\_\_\_\_  
Inspector: \_\_\_\_\_  
Exp Date: \_\_\_\_\_  
Instructions: Various STC's  
Date: 07/26/18

proval

isor

on

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www.dartaerospace.com

| Root Cause                                  |                                                |                                                 | FAULT CATEGORY                                           |                                                |                                            |
|---------------------------------------------|------------------------------------------------|-------------------------------------------------|----------------------------------------------------------|------------------------------------------------|--------------------------------------------|
| Environment <input type="checkbox"/>        | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>        |                                                          |                                                |                                            |
| Design <input type="checkbox"/>             | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                |                                                          |                                                |                                            |
| Doc/Data <input type="checkbox"/>           | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>  |                                                          |                                                |                                            |
| Equip/Tooling <input type="checkbox"/>      | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                 |                                                          |                                                |                                            |
| Handling/Pre <input type="checkbox"/>       | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/> |                                                          |                                                |                                            |
| Material <input type="checkbox"/>           | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                  |                                                          |                                                |                                            |
| Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                     | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/> |
| Tribal Knowledge <input type="checkbox"/>   | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                   | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>        |
| LOA <input type="checkbox"/>                | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/> | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>           |
| Substation <input type="checkbox"/>         | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>            |
| Past Expiry Date <input type="checkbox"/>   | Manufacturing Process <input type="checkbox"/> |                                                 |                                                          | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>           |
| Misidentified <input type="checkbox"/>      | Past Due <input type="checkbox"/>              | OTHER : _____                                   |                                                          | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>  |

|   |               |                                    |                |                |
|---|---------------|------------------------------------|----------------|----------------|
|   |               |                                    | 2.118          |                |
| 6 | Bracket, Stud | 0.325Inches $\pm 0.010$            | 0.335<br>0.315 | 0,328          |
| 7 | Bracket, Stud | 0.203Inches $+ 0.005$<br>$- 0.001$ | 0.208<br>0.202 | 0,204 Diameter |
| 8 | Bracket, Stud | 0.063Inches $\pm 0.010$            | 0.073<br>0.053 | 0,058          |
| 9 | Bracket, Stud | 0.320Inches $+ 0.006$<br>$- 0.001$ | 0.326<br>0.319 | 0,328 Diameter |

Plex 7/24/18 9:16 AM Dart.lajeunesse.marie



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |  |  |                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|--|------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Cross tube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                                      |  |  | Skid-tube <input type="checkbox"/> | Cross tube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Cross tube <input type="checkbox"/>                                                                                                                                                | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Engineering <input type="checkbox"/> |  |  |                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quality <input type="checkbox"/>     |  |  |                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Other <input type="checkbox"/>       |  |  |                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |  |  |                                    |                                     |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

|                                         |         |                    |                                                     |
|-----------------------------------------|---------|--------------------|-----------------------------------------------------|
| Date :                                  | Step #: | QTY Effective :    | MRB (QSI042) Approval                               |
| <b>Description Work Order Deviation</b> |         | <b>Disposition</b> | <b>Completed By</b>                                 |
|                                         |         |                    |                                                     |
|                                         |         |                    | <b>Lead hand / Supervisor Approval Verification</b> |
|                                         |         |                    | <b>QC / QA Coordinator Approval</b>                 |

| Root Cause                                  |                                                |                                                 |                                                            | FAULT CATEGORY                                 |                                               |  |  |
|---------------------------------------------|------------------------------------------------|-------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|--|--|
| Environment <input type="checkbox"/>        | No Re-verification <input type="checkbox"/>    | Pressure/Forced <input type="checkbox"/>        | Temperature/Cure <input type="checkbox"/>                  | Power Loss/Surge <input type="checkbox"/>      | Positioned Wrong <input type="checkbox"/>     |  |  |
| Design <input type="checkbox"/>             | Operator <input type="checkbox"/>              | Bending <input type="checkbox"/>                | Set-up <input type="checkbox"/>                            | Folio/Program <input type="checkbox"/>         | Outside Dimensions <input type="checkbox"/>   |  |  |
| Doc/Data <input type="checkbox"/>           | Offset/Setup <input type="checkbox"/>          | Centre Not Concentric <input type="checkbox"/>  | BOM/Route <input type="checkbox"/>                         | Grain <input type="checkbox"/>                 | Over/Under tolerance <input type="checkbox"/> |  |  |
| Equip/Tooling <input type="checkbox"/>      | Supplier <input type="checkbox"/>              | Cracks <input type="checkbox"/>                 | Broken/Damage/Defect <input type="checkbox"/>              | Weld <input type="checkbox"/>                  | Part Incorrect <input type="checkbox"/>       |  |  |
| Handling/Pre <input type="checkbox"/>       | Training <input type="checkbox"/>              | Crimp/Kink/Ripple/Wave <input type="checkbox"/> | Inspection Incomplete/Unqualified <input type="checkbox"/> | Wrong Stock Pulled <input type="checkbox"/>    | Part Lost/Missing <input type="checkbox"/>    |  |  |
| Material <input type="checkbox"/>           | Use for Testing <input type="checkbox"/>       | Cuffs <input type="checkbox"/>                  | Contamination <input type="checkbox"/>                     | Out of Sequence <input type="checkbox"/>       | Part Moved <input type="checkbox"/>           |  |  |
| Internal Transport <input type="checkbox"/> | Poor Information <input type="checkbox"/>      | Crushing <input type="checkbox"/>               | Countersink <input type="checkbox"/>                       | Off-set <input type="checkbox"/>               | Drawing <input type="checkbox"/>              |  |  |
| Tribal Knowledge <input type="checkbox"/>   | Rushing <input type="checkbox"/>               | Heat Treat <input type="checkbox"/>             | Cut Too Short <input type="checkbox"/>                     | Mislabeled <input type="checkbox"/>            | Finish <input type="checkbox"/>               |  |  |
| LOA <input type="checkbox"/>                | Product Improvement <input type="checkbox"/>   | Wave/Twist in Tube <input type="checkbox"/>     | Instructions Incomplete/Unclear <input type="checkbox"/>   | Fit/Function <input type="checkbox"/>          | Misread <input type="checkbox"/>              |  |  |
| Substation <input type="checkbox"/>         | Process Improvement <input type="checkbox"/>   | Marks/Chatter <input type="checkbox"/>          | Drill Holes <input type="checkbox"/>                       | Misaligned/off center <input type="checkbox"/> | Turning Sequence <input type="checkbox"/>     |  |  |
| Past Expiry Date <input type="checkbox"/>   | Manufacturing Process <input type="checkbox"/> | OTHER : _____                                   |                                                            |                                                |                                               |  |  |
| Misidentified <input type="checkbox"/>      | Past Due <input type="checkbox"/>              |                                                 |                                                            |                                                |                                               |  |  |